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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/885,698	06/20/2001	Santhana Krishnamachari	US 010296	4263

24737   7590   09/18/2003

PHILIPS INTELLECTUAL PROPERTY & STANDARDS
P.O. BOX 3001
BRIARCLIFF MANOR, NY   10510

EXAMINER
YUFA, ALEKSANDR L

ART UNIT	PAPER NUMBER
2133	

DATE MAILED: 09/18/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 07-01)

	Application No.	Applicant(s)
Office Action Summary	09/885,698	KRISHNAMACHARI, SANTHANA
	Examiner	**Art Unit**	
	Alex L. Yufa, Ph.D.	2133	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on <u>20 June 2001</u> .

2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) <u>1-14</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) <u>1-14</u> is/are rejected.

7) ☒ Claim(s) <u>1, 14</u> is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) ☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

    If approved, corrected drawings are required in reply to this Office action.

12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

        1.☐ Certified copies of the priority documents have been received.

        2.☐ Certified copies of the priority documents have been received in Application No. _____ .

        3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

    a) ☐ The translation of the foreign language provisional application has been received.

15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>2</u> .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____ .

DETAILED ACTION

Claim Objections

1.   Claims 1 and 14 are objected to because of the following informalities:

a) claim 1, step 1: "a packaging system for packaging ...";

b) claim 14, all steps: each step does not recite a functional operations, but

just declares the statement (e.g. "program code configured to ..." instead of, for

example, "configuring a program code to ...").

Appropriate correction is required.

Claim Rejection

Claim Rejections - 35 USC § 112

1.   The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2.   Claims 6-9 are rejected under 35 U.S.C. 112, first paragraph, as failing to

comply with the enablement requirement. The claim(s) contain subject matter which

was not described in specification in such way as to enable one skilled in the art to

which it pertains, or with which it is most nearly connected, to make and/or use the

invention. A single means/step claim, i.e., where a means/step recitation does not

appear in combination with another recited element of means/steps, is subject to an

undue breadth rejection under 35 U.S.C. 112, first paragraph. *In re* Hyatt, 708 F.2d

712, 714-715, 218 USPQ 195, 197 (Fed. Cir. 1983).

Specifically:

a) claim 6 cites the single means "means for packaging the multimedia data", where a

means recitation does not appear in combination with another/other recited means of

encoder.

Claim 7 depends from respective claim 6, hence inherit the deficiencies in claim 6.

b) claim 8 cites the single means "means for reading multimedia data", where a means

recitation does not appear in combination with another/other recited means of decoder.

Claim 9 depends from respective claim 8, hence inherit the deficiencies in claim 8.

Claim Rejections - 35 USC § 103

2.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3.   Claims 1-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over EP

0935363A1 to Tanaka et al. in view of US 5,544,328 to Seshadri.

Referring to claim 1, Tanaka et al. discloses an information data transmission system,

and error correcting encoder and decoder providing packaging the multimedia data into

discrete packets, and "a train of packages outputted from the multiplexer" (see e.g.

page 18, line 11), which is further processed by the appropriate means. Seshadri

teaches, that data is divided into two or more substreams. Each of one or more of the

substreams is then individually redundancy coded using a code of any desired type."

(see column 3, lines 31-36). Additionally, Tanaka teaches, that "multi-level coding can

be advantageously used to code one or more of the data streams of an overall unequal-error-protection signaling scheme." (see column 3, lines 43-45).

Accordingly, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Tanaka with the teaching of Seshadri by using packaging the multimedia data into discrete packets and inserting error protection data into each packet, because one of ordinary skill in the art would use the division of the data (codeword) into discrete packets and inserting error protection data (redundant/check bit(s)) into each packet to provide more efficient error detection and correction of the whole data and authenticating the multimedia digitalized data, considering the shortened length of the discrete packet in comparison with the whole length of the codeword.

Claims 2-5 depend from respective claim 1, hence inherit the rejection in claim 1. Also, according to claims 2-5, Seshardi teaches to use "an overall unequal-error-protection" (see column 3, lines 44, 45), that does not limit and inherently teaches to use proportional principles in application to size of each media stream.

Tanaka teaches to select a media stream from the group of voice and image (see e.g., Figs.28, 35A and appropriate description across specification), and decoding multimedia data by "decoders 61, 62" (see Fig. 39), and Seshardi teaches to use "decoders 231 and 232" (see column 6, lines 26, 39).

Accordingly, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Tanaka with the teaching of Seshadri by using proportional, selecting and decoding principles to the size of media

stream, because one of ordinary skill in the art would use any unequal-error-protection (including proportional) method to a size of media stream and decoding the packets of multimedia data, that provides the authentic multimedia data transmission and error correction encoding and decoding system.

According claims 6-8, Tanaka discloses packaging the multimedia data into packets of first type of media (e.g., "voice"), second type of media (e.g., "image") and third field of error protection data (e.g., "H1", "H2") (see e.g., Fig.5) and encoding by "encoders 31, 32 and 51, 52" (applicant's claim 6) or decoding by "decoders 42, 43 and 61, 62" (applicant's claim 8), as shown in Figs. 32A, 32B, 37, 39.

Accordingly, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Tanaka with the teaching of Seshadri by using encoding/decoding means for multimedia packaging, because one of ordinary skill in the art would use encoder/decoder to provide multimedia data packaging into discrete packets considering any unequal-error-protection (including proportional), that provides the authentic multimedia data transmission and error correction encoding and decoding system.

Claims 7 and 9 depend from claims 6 and 8 respectively, hence inherit the rejection in claim 6 and claim 8 respectively. Also, according to claims 7 and 9, Tanaka teaches to use, for example, a "selector 31" (see Figs.32A, 35A) to select media streams from the group.

Accordingly, it would have been obvious to one having ordinary skill in the art at the time the invention was made with the teaching of Tanaka by using selector to select media streams from the group, because one of ordinary skill in the art would use obvious selecting operation in order to select the type of data, such as, video, audio, etc. to provide further the appropriate data processing, that is in compliance with the well known multimedia data streams processing procedure.

Referring to claim 10, Tanaka discloses a method providing "receiving" (see Fig.35B) multimedia data via "antenna 21" (see Fig. 1A) including the different types (e.g., Image, voice, etc.) of the media streams and size (see Fig. 1B), packaging the multimedia data into discrete packets, and definition of the error protection data (see, e.g., Fig.7). Tanaka does not explicitly point out the error protection data inserting, but Seshardi teaches to insert an error protection data and that data is "divided into two or more substreams" and "each of one or more of the substreams is then individually redundancy coded using a code of any desired type" (see column 3, lines 34-36). Accordingly, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Tanaka with the teaching of Seshadri by using cross media error protection for multimedia data, because one of ordinary skill in the art would receive multimedia data, packaging it in the discrete packets in order to provide maximum error protection, and insert the redundant symbols for data streams error control possibility.

Claims 11-13 depend from respective claim 10, hence inherit the rejection in claim 10. Also, according to claims 11-13, Tanaka does not limit and explicitly

point out to the size of the discrete packets inherently providing possibility of any size of the discrete packets including the same size of the discrete packets. Further Tanaka describes the "transmitting" (see Fig. 35A) via "antenna 17" (see Fig.1B) and decoding by "decoder 43" (see Fig. 35B) operations with the discrete packets and media streams.

Accordingly, it would have been obvious to one having ordinary skill in the art at the time the invention was made with the teaching of Tanaka by using the same size of discrete packets and providing the transmission and decoding of the discrete packets, because one of ordinary skill in the art would obviously use operations of transmission and decoding to provide the efficient operability of the multimedia data system.

Referring to claim 14, Tanaka et al. discloses providing packaging the multimedia data into discrete packets and "a train of packages outputted from the multiplexer" (see e.g. page 18, line 11) are further processed by the appropriate means. Seshadri teaches, that data is divided into two or more substreams. Each of one or more of the substreams is then individually redundancy coded using a code of any desired type." (see column 3, lines 31-36). Additionally, Tanaka teaches, that "multi-level coding can be advantageously used to code one or more of the data streams of an overall unequal-error-protection signaling scheme." (see column 3, lines 43-45).

Accordingly, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Tanaka with the teaching of Seshadri by using packaging the multimedia data into discrete packets and inserting error

protection data into each packet, because one of ordinary skill in the art would use the division of the data (codeword) into discrete packets and inserting error protection data (redundant/check bit(s)) into each packet to provide more efficient error detection and correction of the whole data and authenticating the multimedia digitalized data, considering the shortened length of the discrete packet in comparison with the whole length of the codeword.

Claims 15,16 depend from respective claim 14, hence inherit the rejection in claim 14. Also, according to claims 15, 16, Tanaka teaches to provide determine and estimate the size of media stream (see Fig.3, 11, 13A).

Accordingly, it would have been obvious to one having ordinary skill in the art at the time the invention was made with the teaching of Tanaka by using the steps of process providing definition and estimation of the media stream size, because one of ordinary skill in the art would obviously use operations, such as size definition and estimation, with multimedia data and media streams considering necessity of packaging, redundancy bits inserting, and other procedures over multimedia data.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure 5,729,648 to Boyce et al.

The following are suggested formats for either a Certificate of Mailing or Certificate of Transmission under 37 CFR 1.8(a). The certification may be included with all correspondence concerning this application or proceeding to establish a date of

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alex Yufa whose telephone number is (703) 305-0715. The examiner can normally be reached on M-F at 8:00am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Albert DeCady can be reached on (703) 305-9595. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 746-7239 for regular communications and (703) 746-7238 for After Final communications.
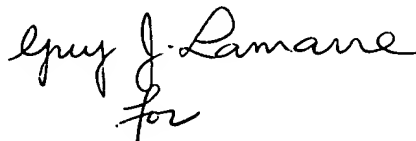
Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 746-7240.

aly
August 25, 2003   Alex L. Yufa, Ph.D.

Examiner

Art Unit 2133

Albert DeCady
Primary Examiner

REFERENCES

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US 5,729,648

EP 0395363 A1